

Statewide High-Speed Train System



Connecting from Merced to:

- San Francisco Bay Area
- Los Angeles
- Orange County
- San Diego
- Inland Empire
- San Jose
- Central Valley
- Sacramento



California High-Speed Train Concept



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U.S. Department
of Transportation
**Federal Railroad
Administration**

Merced HST Station Planning Area Conceptual Site Design



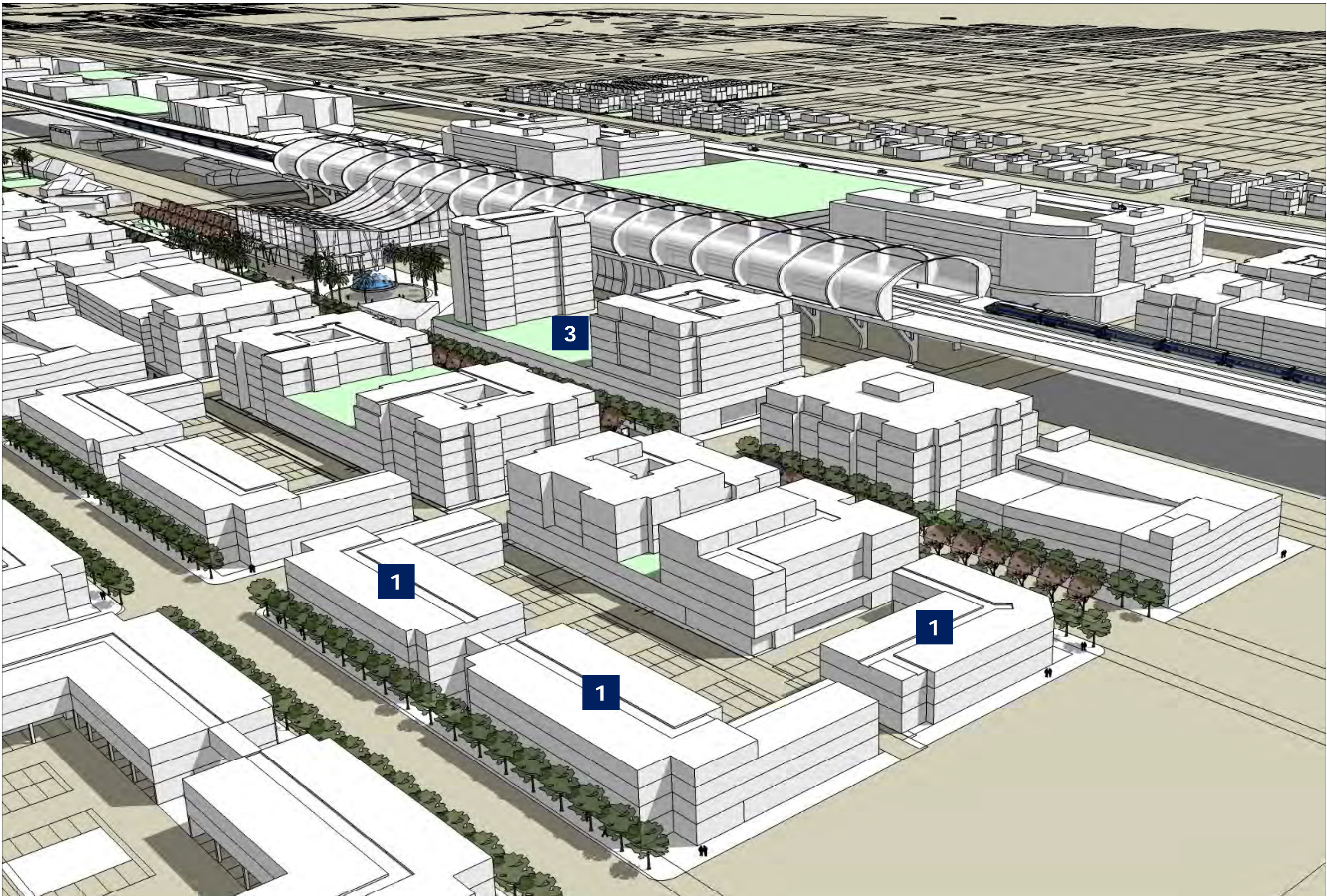
Potential Station Area Development
View toward Merced Station Entrance

Merced HST Station Planning Area Conceptual Site Design



Potential Station Area Development
View toward Merced Station Entrance

Merced HST Station Planning Area Conceptual Site Design



View Looking Southeast to Merced Station



View Looking Southeast to Merced Station



Lofts or Apartments



Podium-style Apartments



Hotel & Conference Center



Ground Floor Retail, Office and Residential Lobbies



Mixed-Use Station Development

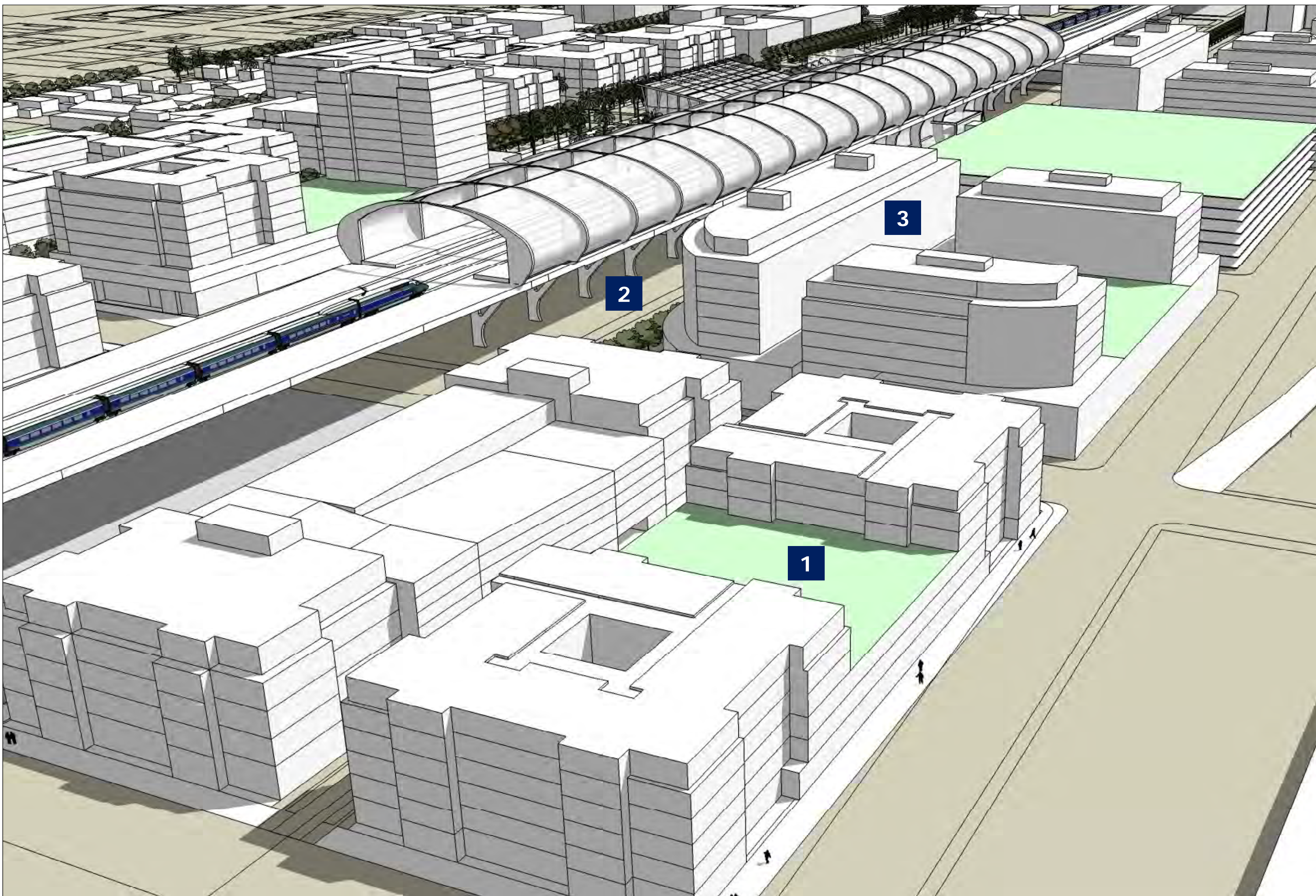


Station Arrival Plaza

Potential Station Area Development



Merced HST Station Planning Area Conceptual Site Design



View Along the 16th Street Gateway Corridor



View of Residential Infill South of Highway 99



Podium-style Office Site



Use and Activate Spaces Below the Train Tracks



Station Area Mixed-Use Site



Attached Townhomes



Detached Townhomes on a Paseo



Common Green

Potential Station Area Development



Merced HST Station

Principles and Prototypes

Typical HST Station Platform Configurations

Dual Side Platforms

- Most likely possibility for Merced
- Local trains (brown) on outside tracks stop at station
- Each direction has its own platform
- Express trains (red) pass through on inside tracks and do not stop at station



Single Center Platform

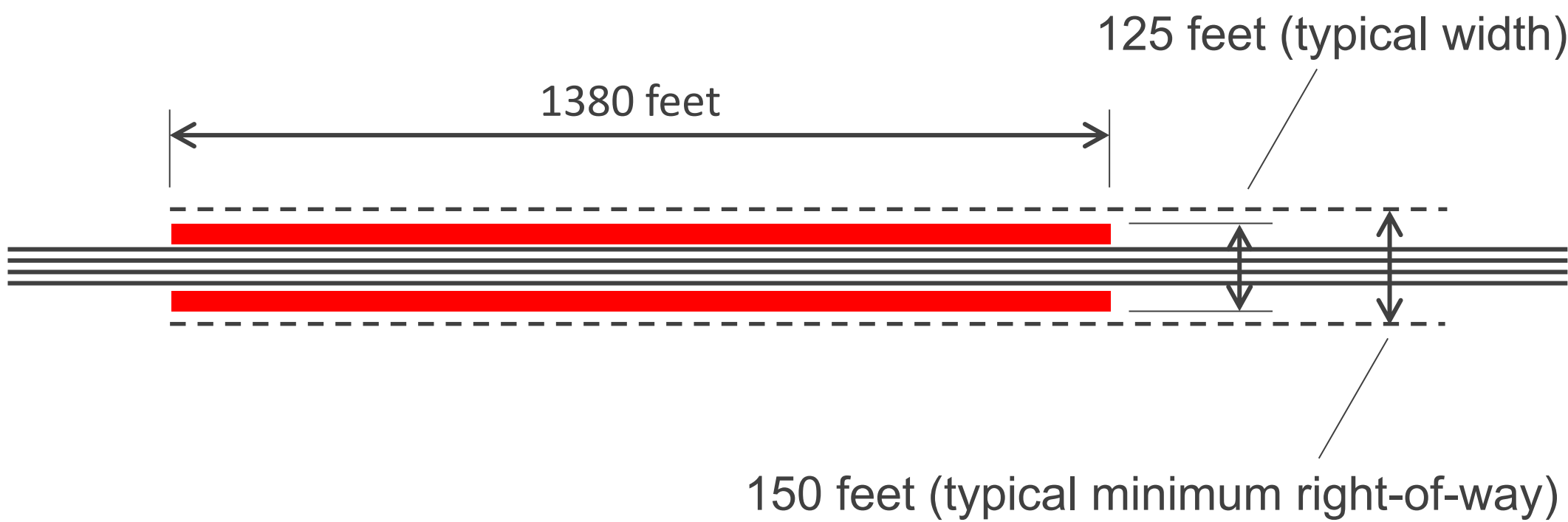
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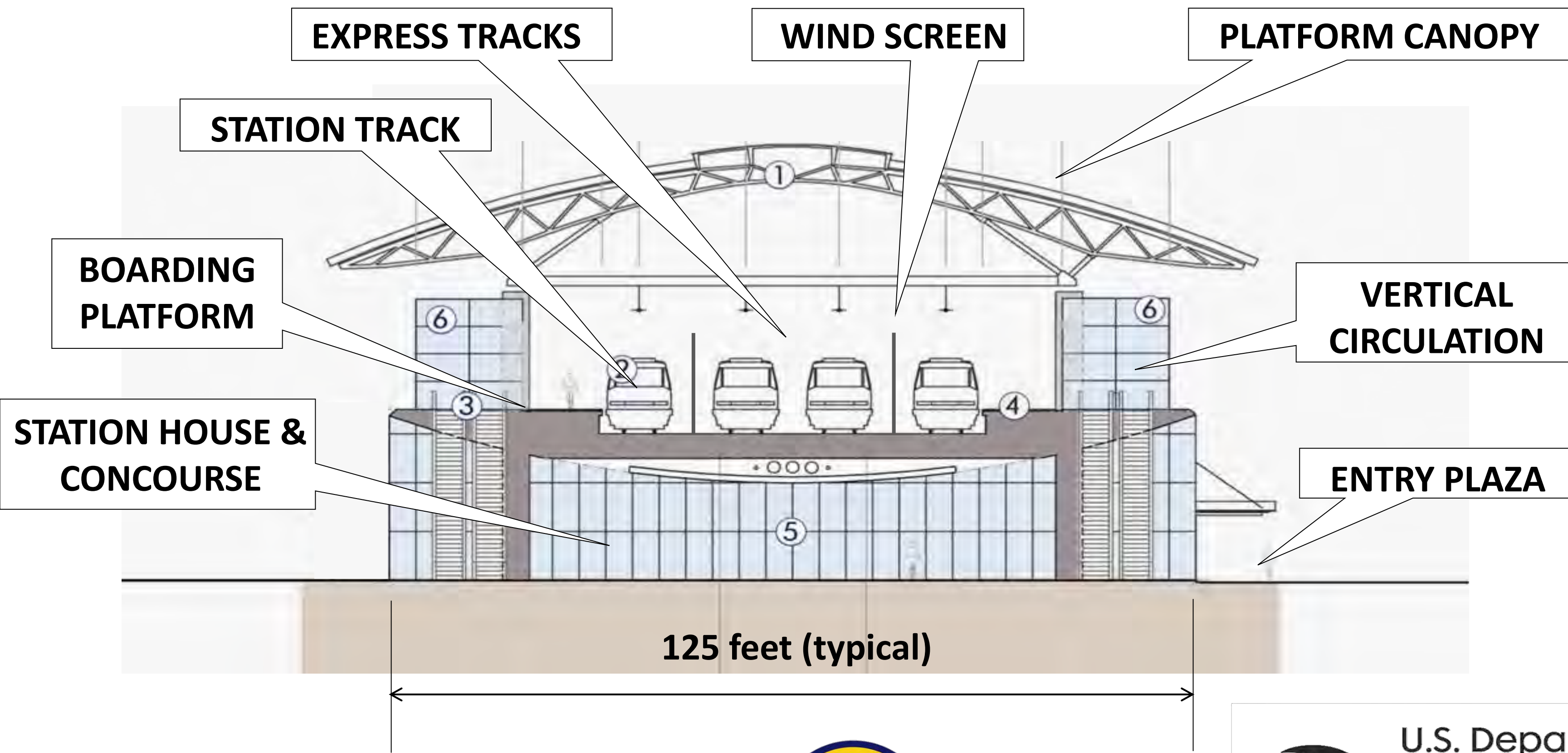
Roles of a High Speed Train Station

| | Transportation: | Land Use: |
|--|--|--|
| Station as part of the High Speed Train system: | Role 1: Facilitate access to HST and transfers with alternate modes | Role 2: Provide goods and services tailored to passengers |
| Station as part of the Community : | Role 3: Encourage local use of HST and public transit | Role 4: Stimulate and support sustainable urban development |

Typical HST Station “Footprint”



Typical Elements of a High Speed Train Station

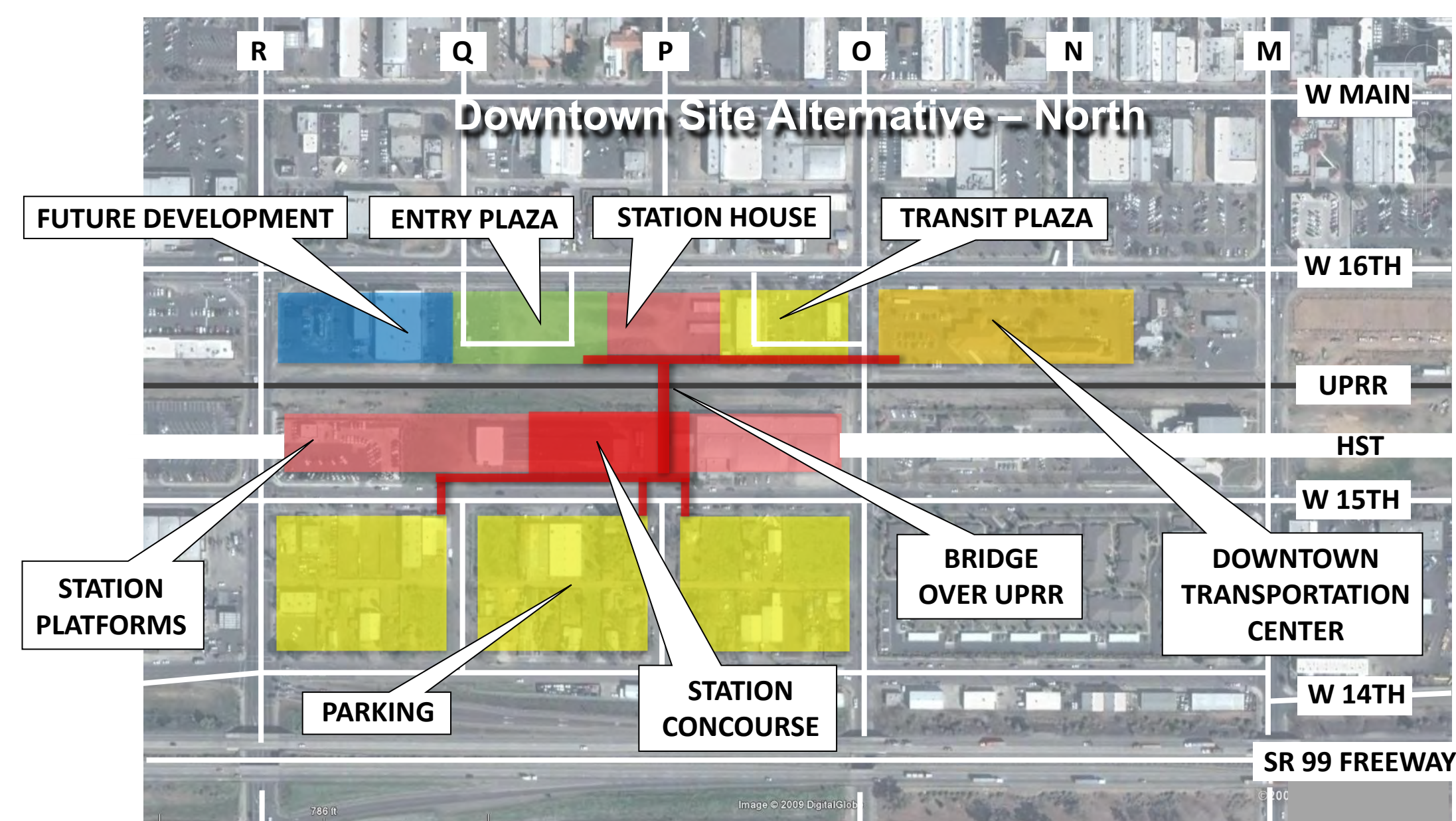


Merced HST Station

Site Analysis and Conceptual Planning

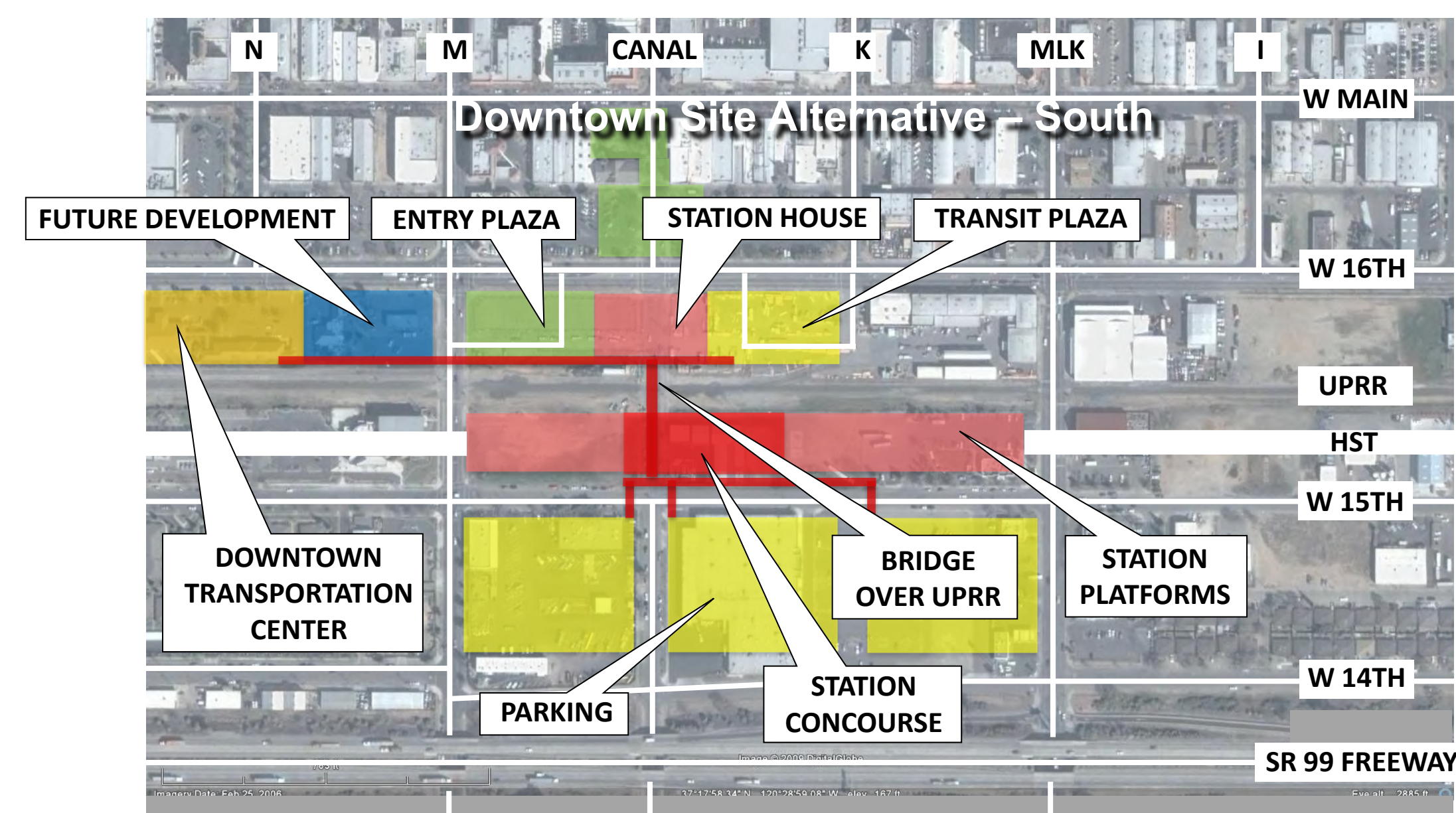
Downtown station sites – North alternative

- Reinforces and supports Downtown redevelopment



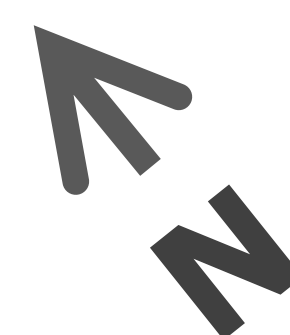
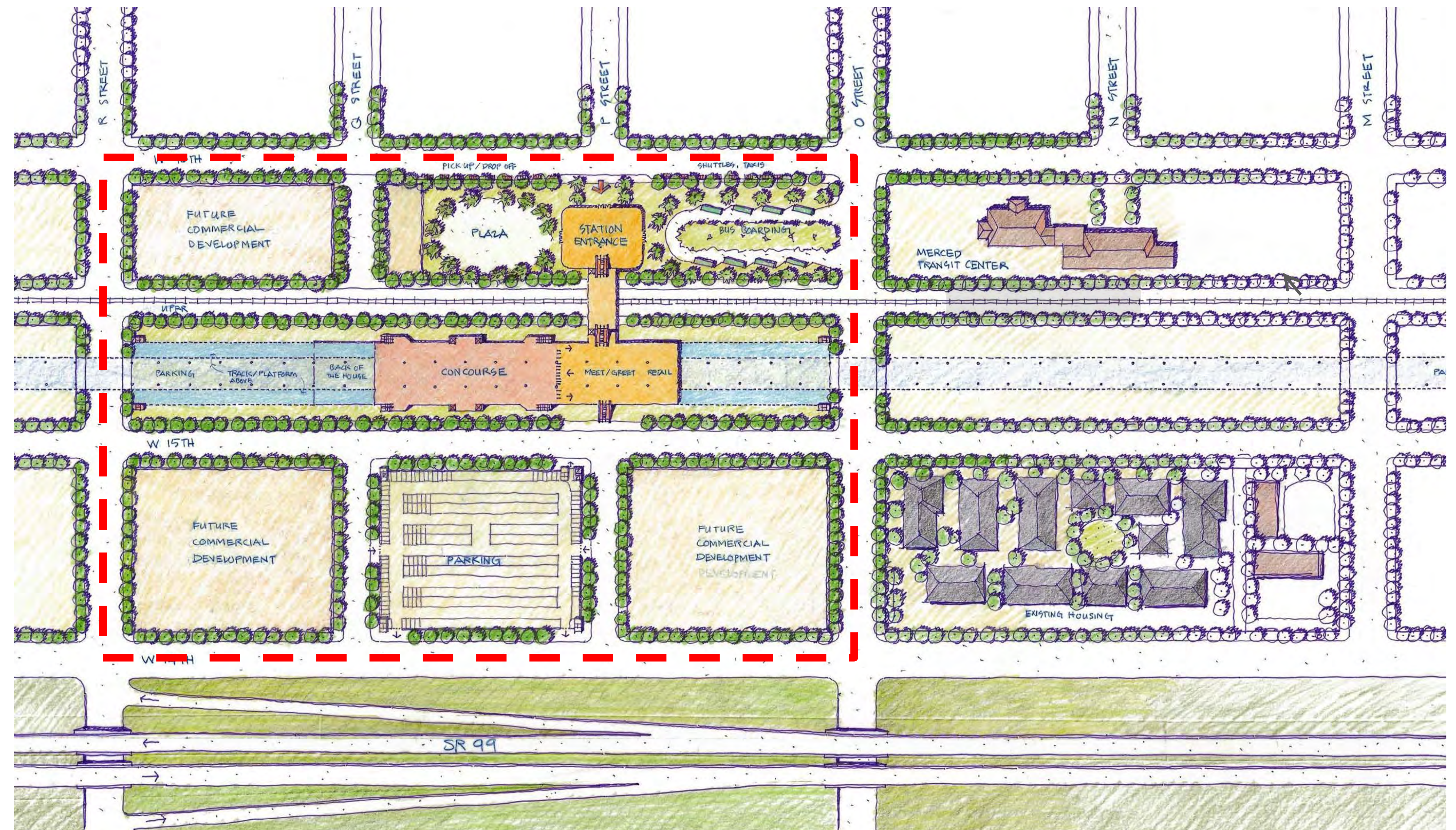
Downtown station sites – South alternative

- Direct access to Downtown commercial core



Conceptual site plan of Downtown HST station at North site alternative

- Approximate area of HST station and associated facilities is six downtown Merced city blocks

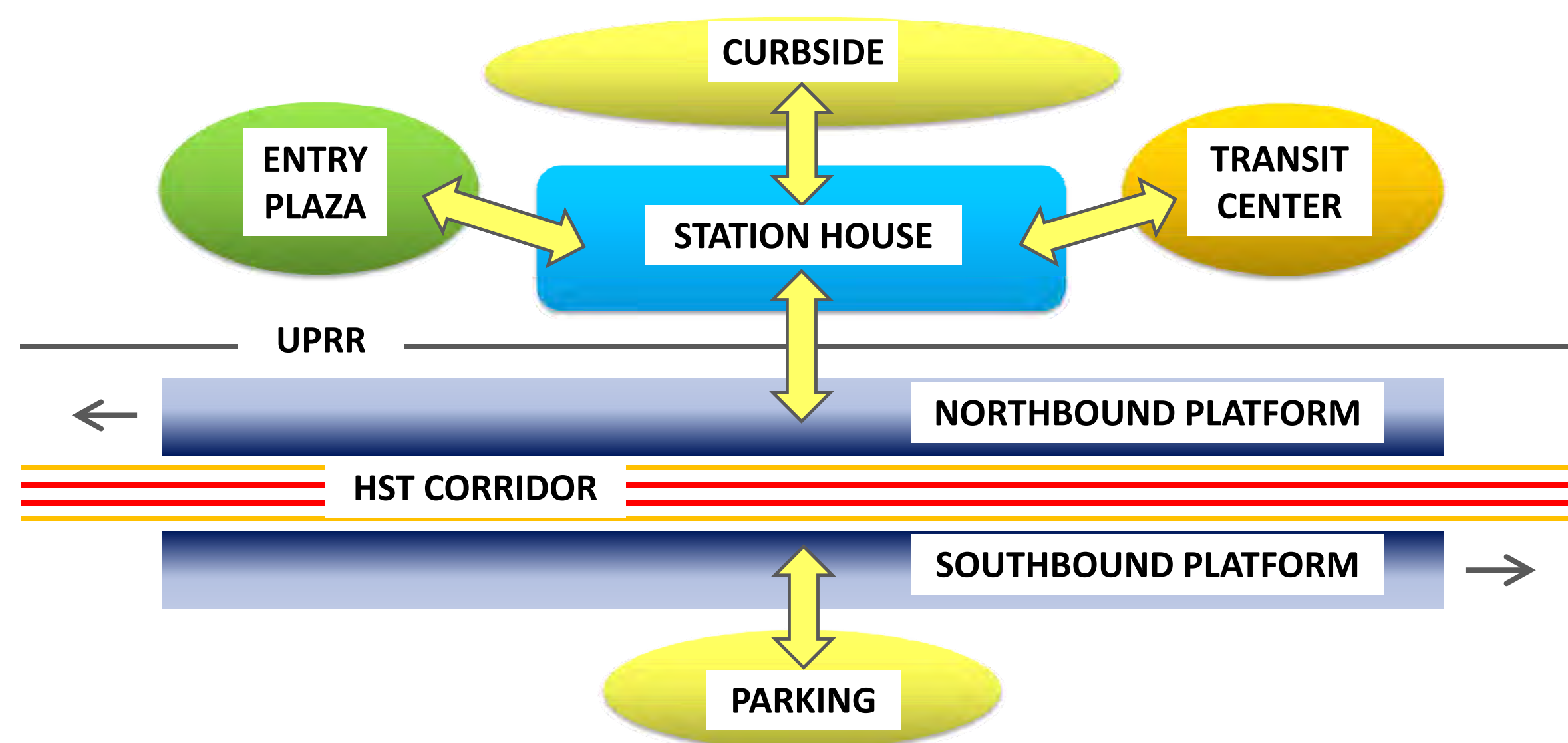


Merced HST Station

Programming and Conceptual Design

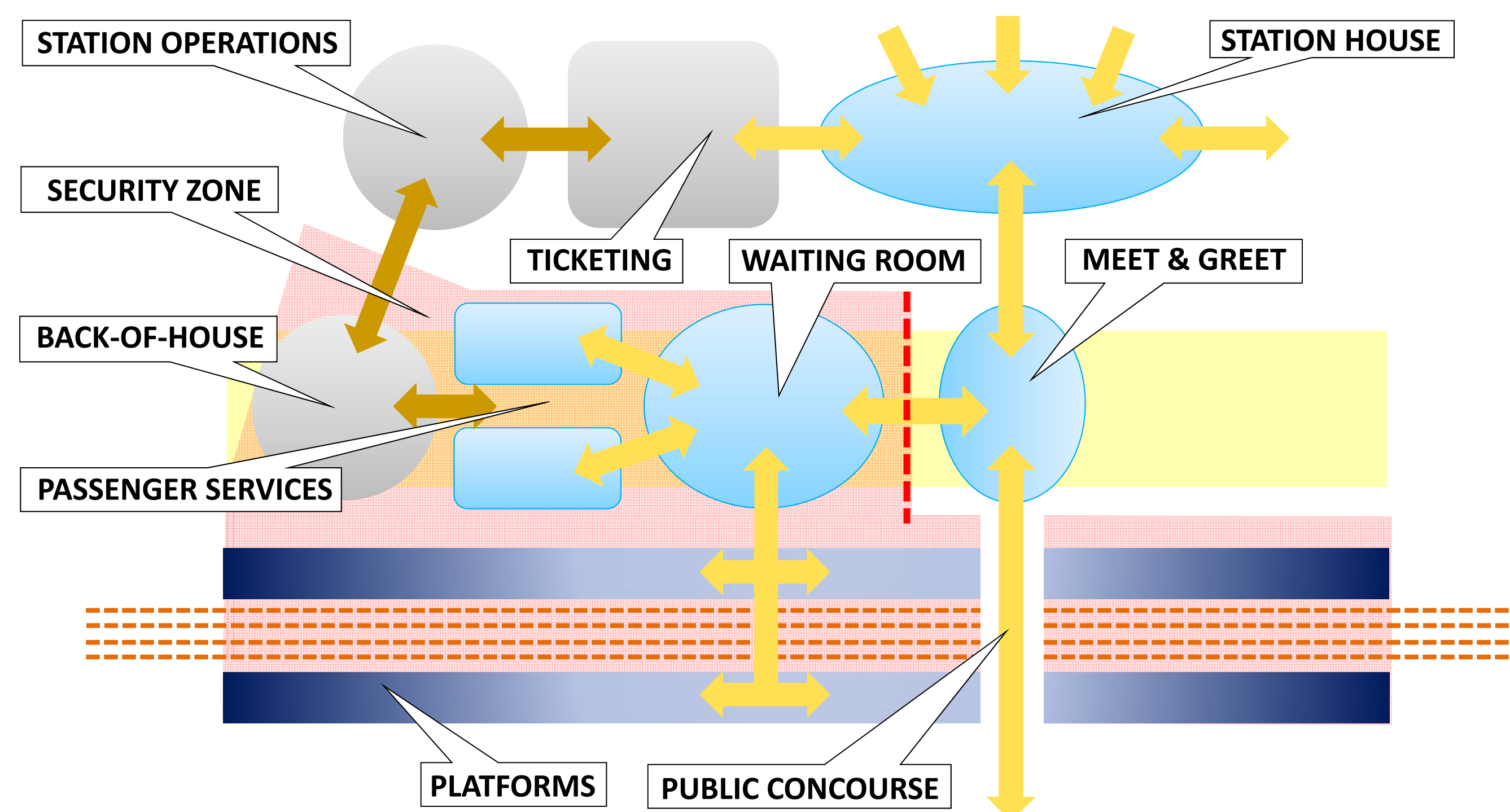
Conceptual Layout Diagram

- Essential link between Site Plan and Functional Relationships diagram



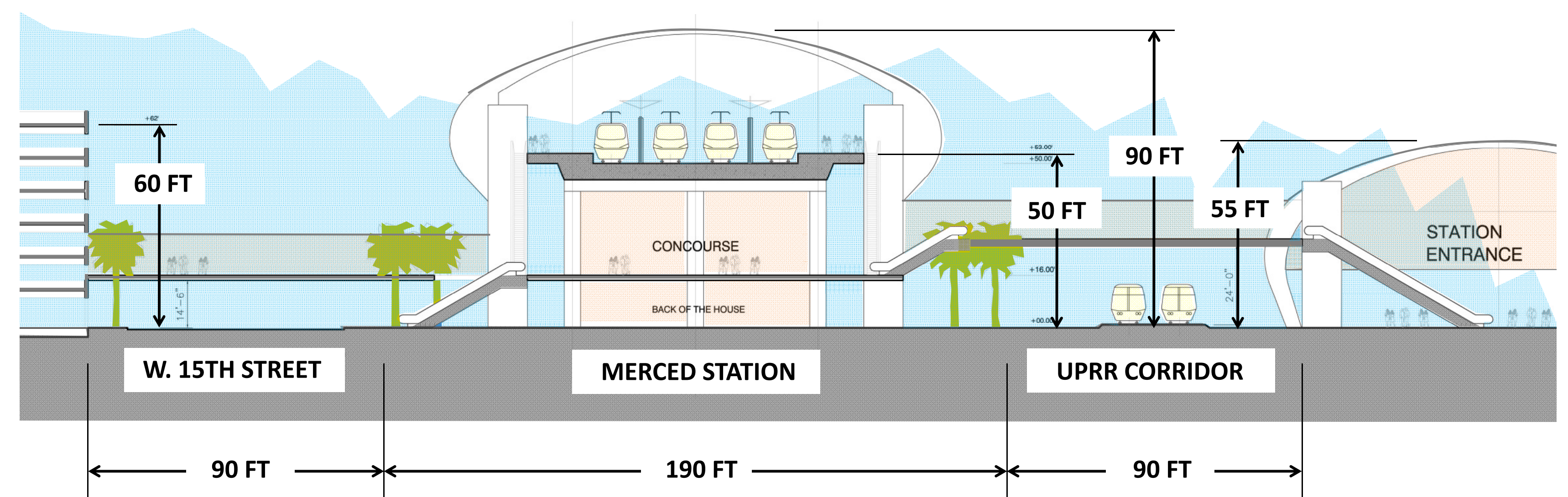
Functional Relationships Diagram

- Basic organization, including circulation, public areas, and operational spaces



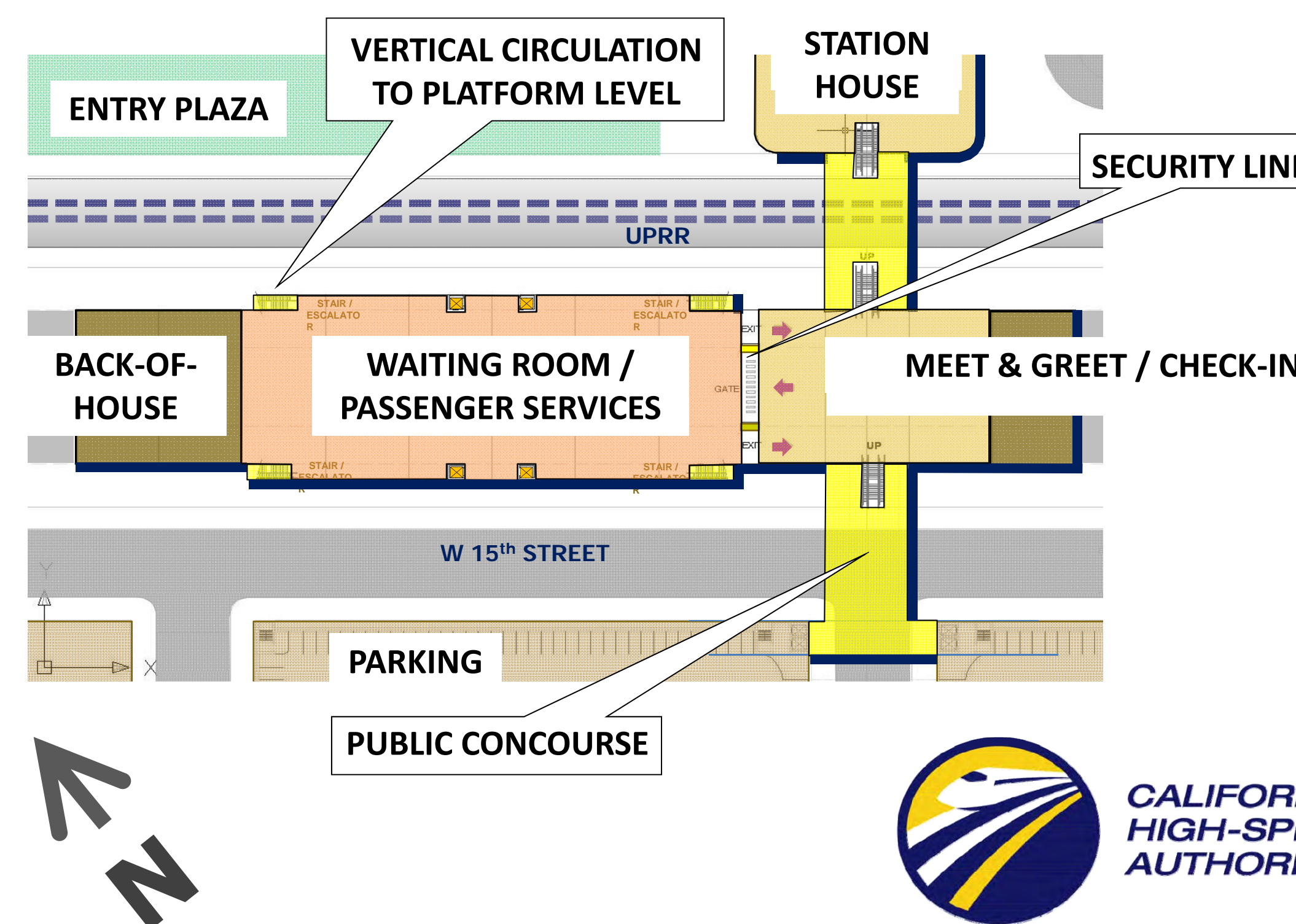
Station Cross-Section

- Study of essential clearances over street and railway corridors, taken along Public Concourse



Station Concourse Plan

- Conceptual layout of station elements and circulation below Platform level



Merced HST Station

Alternative Parking Scenarios

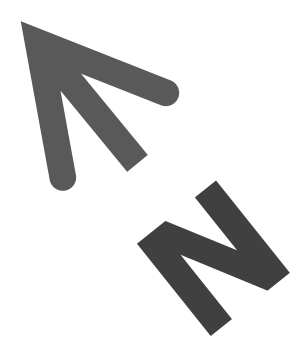
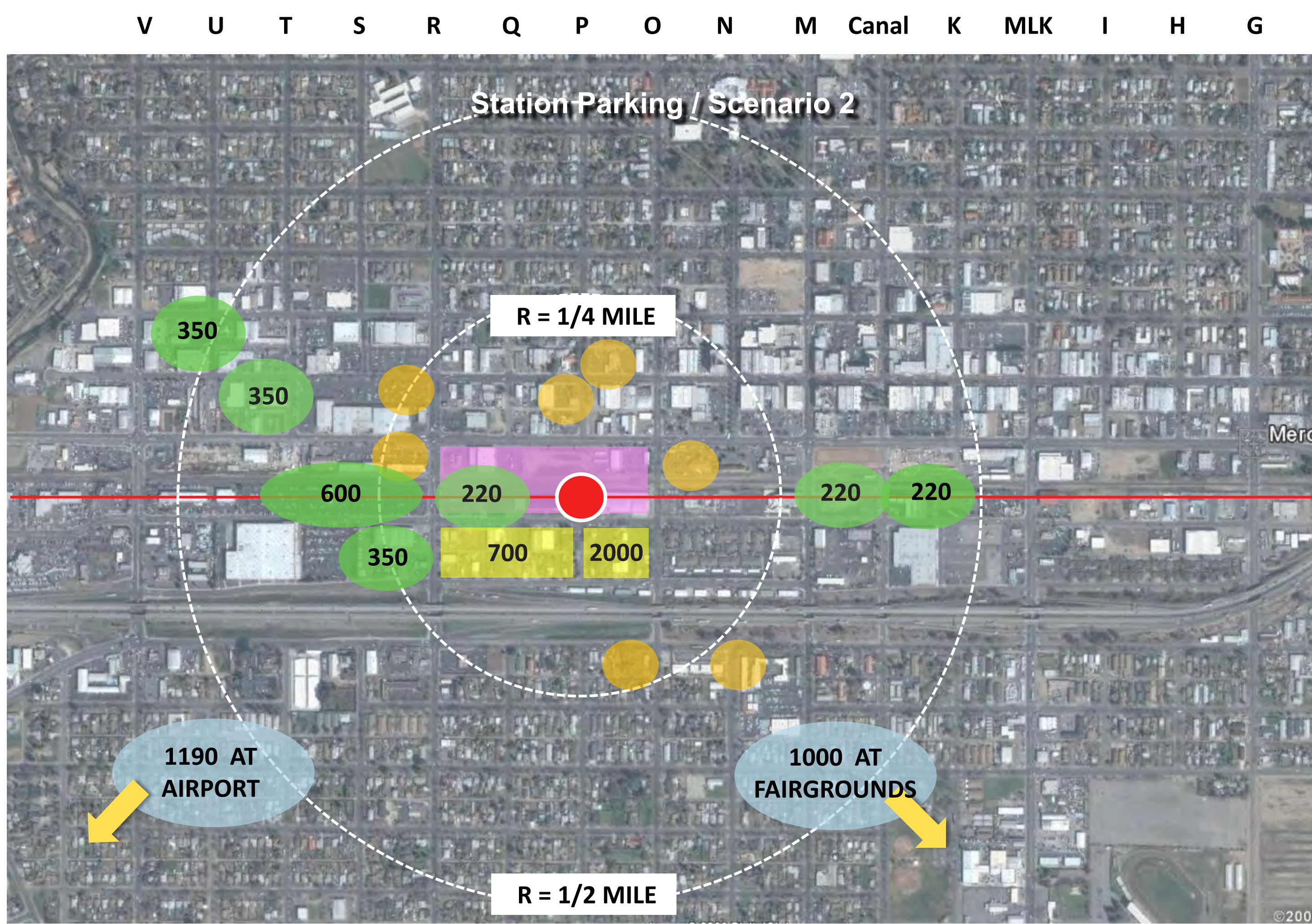
Parking Scenario 1

- Under the initial phase of HST in the Central Valley, Merced Station is the northern terminus, serving passengers from as far north as Sacramento and beyond. The parking capacity of 7700 spaces reflects this drive-in market.
- Under Scenario 1, all parking is provided in garages adjacent to the station.
- The parking capacity drops to 2000 spaces after HST is extended to Sacramento, leaving the garages with an excess capacity of 5700 spaces.



Parking Scenario 2

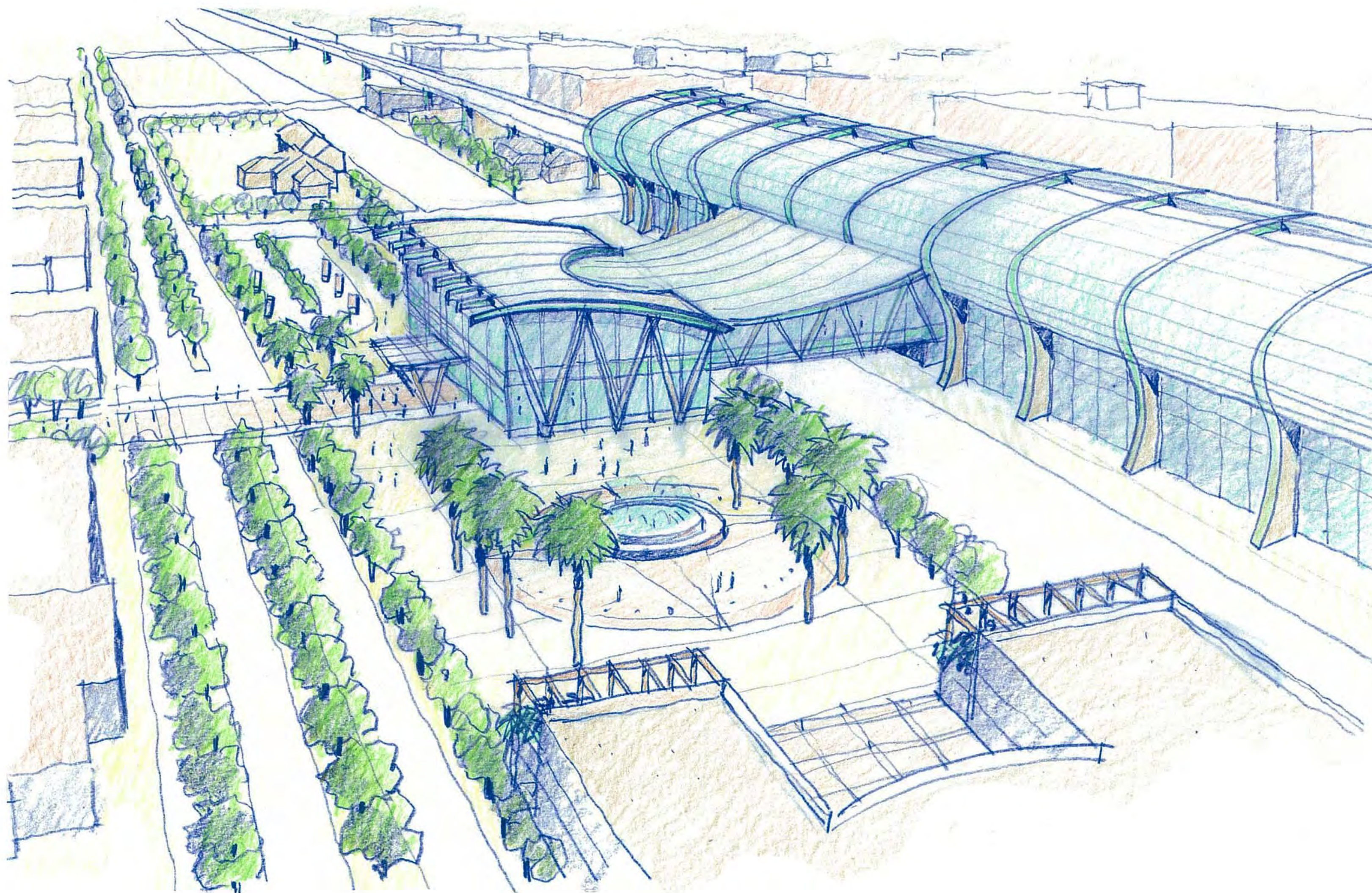
- Under Scenario 2, only the future parking capacity of 2000 spaces is provided in a garage. All other spaces are provided by interim parking at other locations:
- 700 spaces in a station surface lot
 - 2310 spaces in other surface lots within a half mile of the station
 - 500 spaces in shared parking facilities within a half mile of the station
 - 2190 spaces in remote parking facilities, served by parking shuttle buses



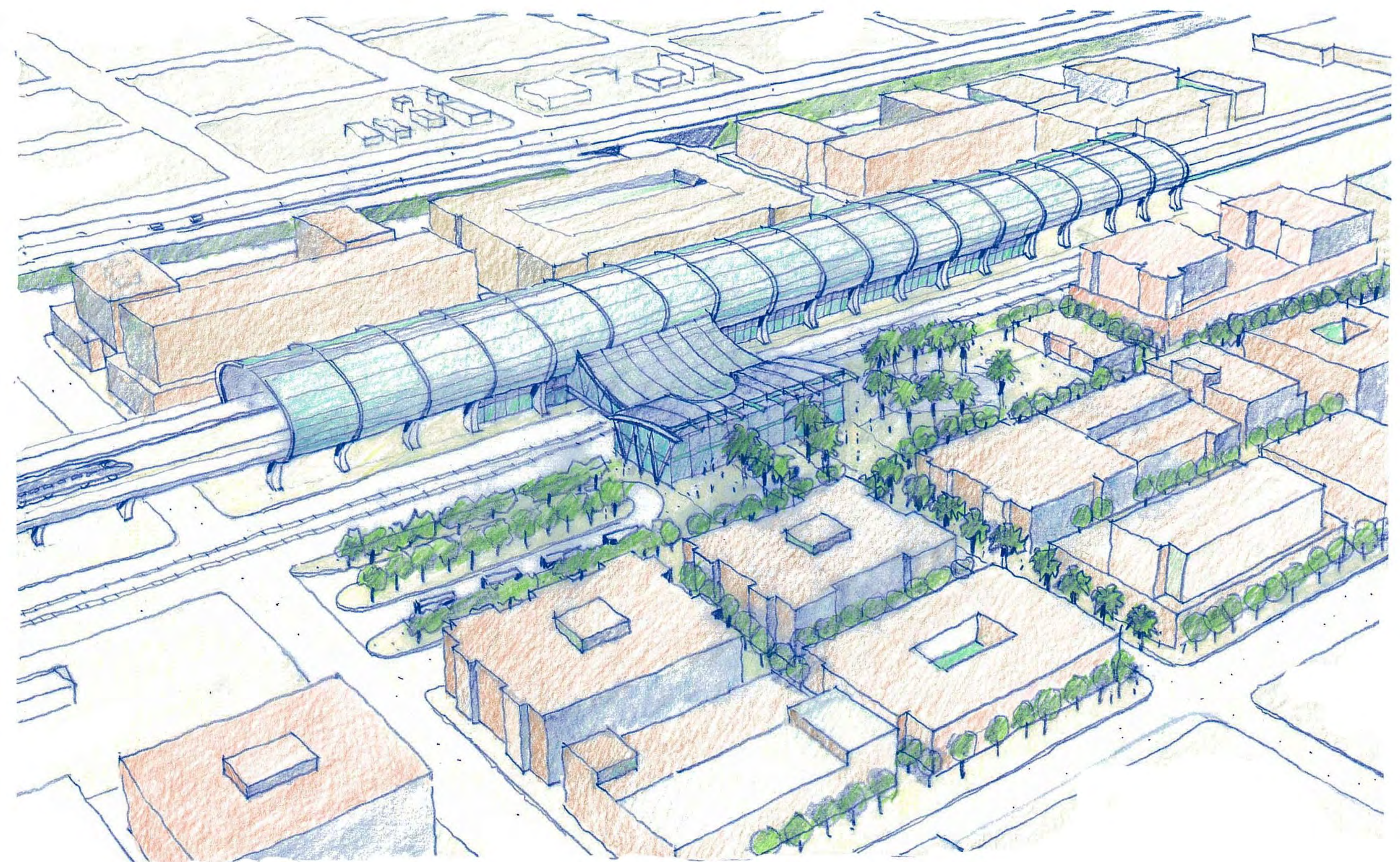
Merced HST Station

Architectural Concept Studies

Aerial view from northwest



Aerial view from northeast



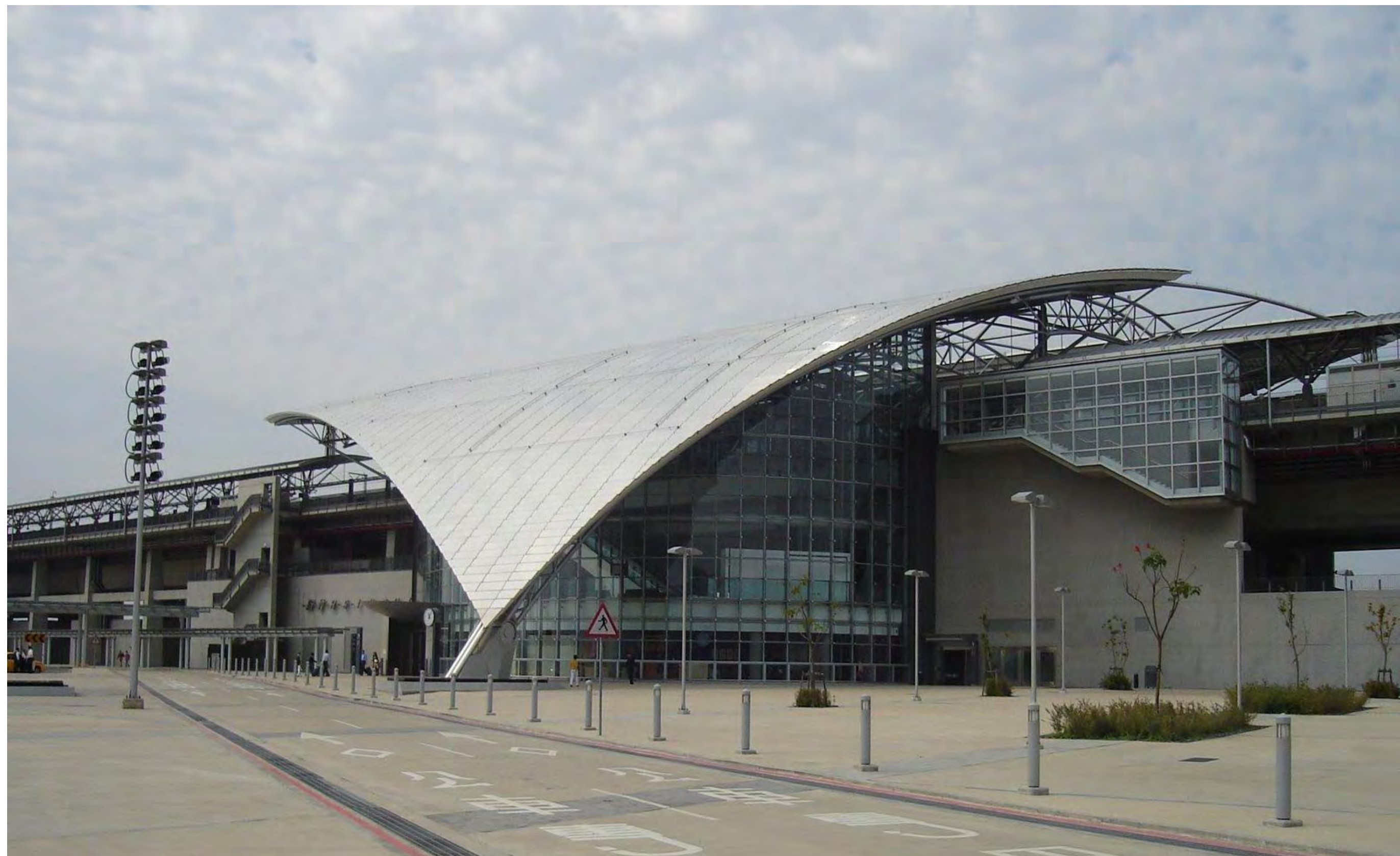
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Examples of HST Stations

Station Entrance



Taiwan High Speed Rail Station

Trainsheds



Saint Pancras Station

Waterloo Train Station



Examples of HST Stations

Station Platforms



Spain High Speed Train Station

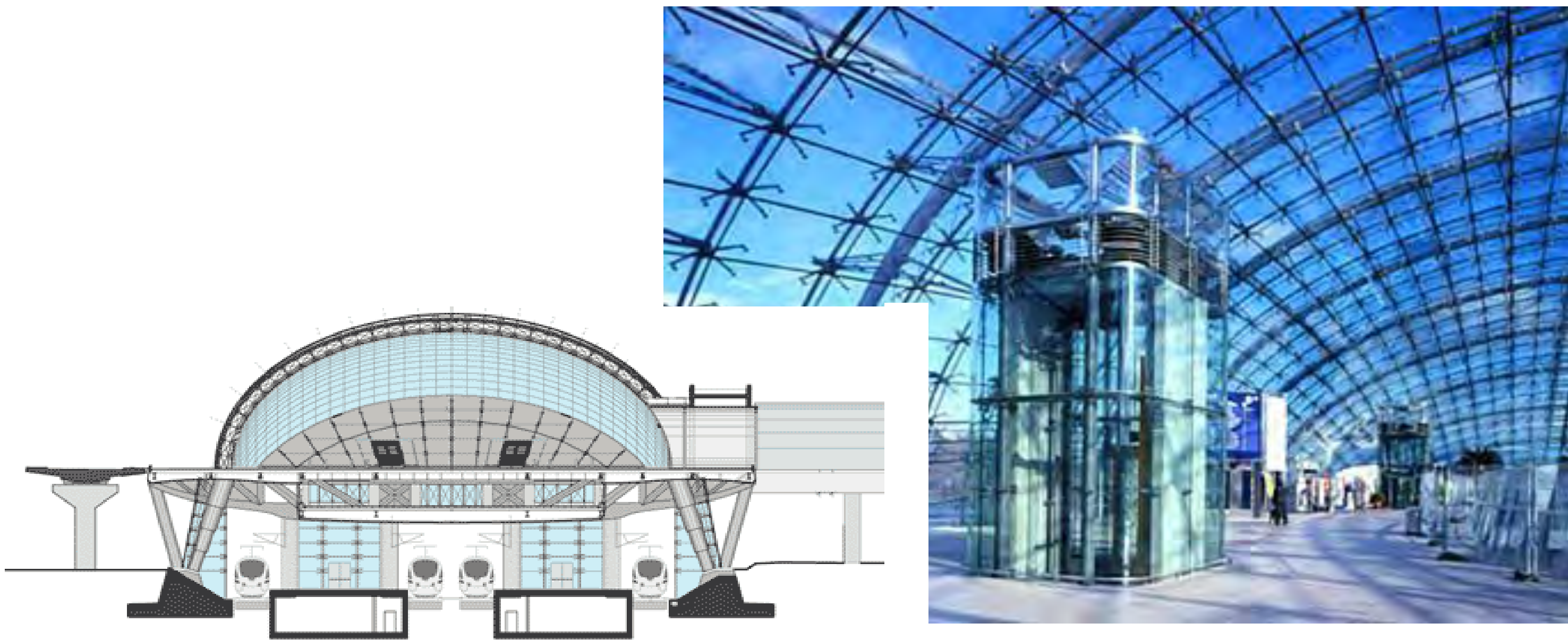


Beijing South Railway Station



Examples of HST Stations

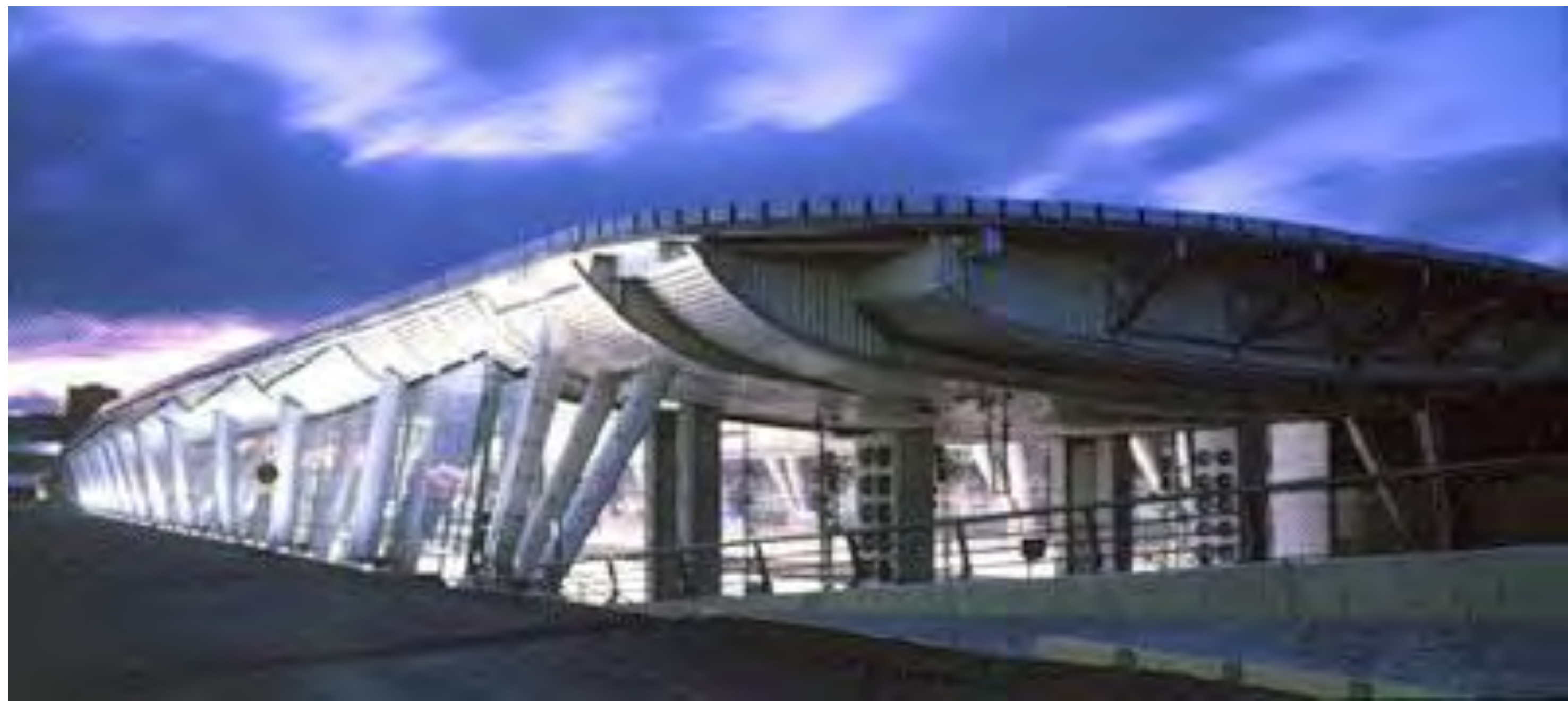
Station Concourse



German Intercity Express, Train Stations



Berlin Central Station



Examples of HST Stations

Express Train Separation



Examples of HST Stations

Commercial Activities under the Trackway



Berlin Savignyplatz Railway Station

